REMARKS

Claims 1, 8-25, 27 and 29-31 are currently pending in the subject application and are presently under consideration. Claims 1, 15-17 and 25 have been amended as shown on pp. 2-6 of the Reply. Claims 12-14 have been canceled.

Applicants' representative thanks the Examiner for the courtesies extended during the teleconference of March 25, 2008.

Favorable reconsideration of the subject patent application is respectfully requested in view of the comments and amendments herein.

I.   **Rejection of Claims 1, 8-25, 27 and 29-31 Under 35 U.S.C. §103(a)**

Claims 1, 8-25, 27 and 29-31 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Pinkas *et al.* (U.S. Patent Application Publication No. 2004/0073813), and further in view of Mizrah (U.S. Patent Application Publication No. 2004/0225880). It is respectfully requested that this rejection should be withdrawn for at least the following reasons. Pinkas *et al.* and Mizrah, individually or in combination, do not teach or suggest each and every element as set forth in the subject claims.

The claimed subject matter relates to a system and/or methodology for generating order-based human interactive proofs (HIPs) as well as systems and methods that facilitate rating their difficulty automatically. In particular, independent claim 1 recites a system that facilitates identifying human interaction comprising: ... ***wherein the order-based HIP problem utilizes three-dimensional ordering, and a user is given a three-dimensional image and asked to identify order of characters from front to back, from left to right, and from largest object to smallest object, and wherein size of the characters and/or size of shapes and/or objects employed in the three-dimensional image is varied, and wherein a sufficient number of visual elements that provide hints of correct order and hints of identities of the characters or objects is included in the three-dimensional ordering to make the HIP problem solvable by a human;....*** The cited art, individually or in combination, fails to teach or suggest such aspects of the claimed subject matter.

Pinkas *et al.* discloses a method for establishing a secure channel between a user and a computer application. The method is performed by rendering to the user a randomly selected identifier; receiving input from the user based on both the randomly selected identifier and a

secret identifier associated with the user; determining, based on the input whether the user demonstrates knowledge of the secret identifier; and authenticating or not authenticating the user based upon the outcome of said determining step. (*See* pg. 1, paragraph [0011]).

In contrast, applicants' claimed subject matter discloses a system that facilitates identifying human interaction. The system utilizes order-based HIPs to identify whether the user is human. The order-based HIPs utilize three-dimensional ordering ("3-D HIP"). Given a three-dimensional image, a user is asked to identify the order of characters from front to back, from left to right, and/or from largest object to smallest object. This type of order-based HIP requires depth computation(s) which tend to be simpler for humans than for computers. To further increase the effectiveness and/or difficulty of the HIP, the size of the characters and/or the size of shapes and/or objects employed in the image can be varied. Moreover, the 3-D HIP can also include a sufficient number of visual elements that provide hints of the correct order and/or hints of the identities of the characters or objects to make it solvable by a human. (*See* pg. 11, line 24-pg. 12, line 24).

Pinkas *et al.* discloses establishing a secure channel between a human user and an application running on a computer system, *via* generating a unique identifier (PIN) associated with a user. (*See* pg. 2, paragraph [0021]). Pinkas *et al.* does not disclose an order-based HIP that utilizes three-dimensional ordering. Pinkas *et al.* merely discloses a random identifier and a random image, wherein the random image comprises the random identifier in a format that is understandable to the user but not easily understandable to an unauthorized application. Accordingly, Pinkas *et al.* does not expressly or inherently disclose a system that provides ... *wherein the order-based HIP problem utilizes three-dimensional ordering, and a user is given a three-dimensional image and asked to identify order of characters from front to back, from left to right, and from largest object to smallest object, and wherein size of the characters and/or size of shapes and/or objects employed in the three-dimensional image is varied, and wherein a sufficient number of visual elements that provide hints of correct order and hints of identities of the characters or objects is included in the three-dimensional ordering to make the HIP problem solvable by a human;....*

Mizrah does not cure the deficiencies of Pinkas *et al.* with respect to independent claim 1, Mizrah discloses an interactive method for authentication of a client in a network environment which utilizes first and second "what user knows" authentication factors. The first and second

"what user knows" authentication factors are algorithmically and parametrically independent. (*See* pg. 3, paragraph [0065]).

As stated *supra*, applicants' claimed subject matter discloses order-based HIPs that utilize three-dimensional ordering ("3-D HIP"). Given a three-dimensional image, a user is asked to identify the order of characters from front to back, from left to right, and/or from largest object to smallest object. Moreover, the 3-D HIP can also include a sufficient number of visual elements that provide hints of the correct order and/or hints of the identities of the characters or objects to make it solvable by a human. Mizrah merely discloses use of a static password and data entry fields corresponding to random partial subsets of a data set. The plurality of random partial subsets of data are presented to user as sets of field position numbers. Accordingly, Mizrah also does not expressly or inherently disclose a system that provides ... ***wherein the order-based HIP problem utilizes three-dimensional ordering, and a user is given a three-dimensional image and asked to identify order of characters from front to back, from left to right, and from largest object to smallest object, and wherein size of the characters and/or size of shapes and/or objects employed in the three-dimensional image is varied, and wherein a sufficient number of visual elements that provide hints of correct order and hints of identities of the characters or objects is included in the three-dimensional ordering to make the HIP problem solvable by a human;....***

Further, independent claim 25 recites a method that facilitates identifying human interaction, comprising: ... ***utilizing three-dimensional ordering in the order-based HIP problem, wherein a user is given a three-dimensional image and asked to identify order of characters from front to back, from left to right, and from largest object to smallest object; and providing a sufficient number of visual elements that provide hints of correct order and hints of identities of the characters or objects in the three-dimensional ordering to make the HIP problem solvable by a human.***

As stated *supra*, Pinkas *et al.* merely discloses a random identifier and a random image, wherein the random image comprises the random identifier in a format that is understandable to the user but not easily understandable to an unauthorized application. And, Mizrah merely discloses use of a static password and data entry fields corresponding to random partial subsets of a data set. The plurality of random partial subsets of data are presented to user as sets of field position numbers.

In view of the aforementioned deficiencies of the cited art, it is respectfully submitted that this rejection be withdrawn with respect to independent claims 1 and 25 (and claims 8-24, 27 and 29-31 which respectively depend there from).

CONCLUSION

The present application is believed to be in condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063 [MSFTP440US].

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number below.

Respectfully submitted,

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